

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

- By
- 5. (currently amended) A high-strength austenitic stainless steel strip exhibiting excellent flatness with a Vickers hardness of 400 or more, having a composition comprising C up to 0.20 mass %, Si up to 4.0 mass %, Mn up to 5.0 mass %, 4.0-12.0 mass % Ni, 12.0-20.0 mass % Cr, Mo up to 0.24-5.0 mass % Mo, N up to 0.15 mass % and the balance being Fe and inevitable impurities and having a value Md(N) in a range of 0-125 defined by a formula: Md(N)=580-520C-2Si-16Mn-16Cr-23Ni-26Cu-300N-10Mo, and having a dual-phase structure of austenite and martensite which involves includes a reversion austenitic phase at a ratio more than 3 vol.%.
- 6. (previously added) The austenitic stainless steel strip defined in claim 5, which further contains at least one or more of Cu up to 3.0 mass %, Ti up to 0.5 mass %, Nb up to 0.50 mass %, Al up to 0.2 mass %, B up to 0.015 mass %, REM (rare earth metals) up to 0.2 mass %, Y up to 0.2 mass %, Ca up to 0.1 mass % and Mg up to 0.10 mass %.
- 7. (currently amended) A method of manufacturing a high-strength austenitic stainless steel strip excellent in flatness of shape with Vickers hardness of 400 or more, which comprises the steps of:

providing an austenitic stainless steel strip having a composition comprising C up to 0.20 mass %, Si up to 4.0 mass %, Mn up to 5.0 mass %, 4.0-12.0 mass % Ni, 12.0-20.0 mass % Cr, Mo up to 0.24-5.0 mass % Mo, N up to 0.15 mass %, optionally at least one or more of Cu up to 3.0 mass %, Ti up to 0.5 mass %, Nb up to 0.50 mass %, Al up to 0.2 mass %, B up to 0.015 mass %, REM (rare earth metals) up to 0.2 mass %, Y up to 0.2 mass %, Ca

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up to 0.1 mass % and Mg up to 0.10 mass %, and the balance being Fe except inevitable impurities under the condition that a value Md(N) is 0-125 defined by a formula: Md(N)=580-520C-2Si-16Mn-16Cr-23Ni-26Cu-300N-10Mo;

solution-heating said austenitic stainless steel strip;

cold-rolling said austenitic stainless steel strip to generate a deformationinduced martensite phase; and

re-heating said cold-rolled austenitic stainless steel strip at 500-700°C to induce a phase reversion, by which an austenitic phase is generated at a ratio of 3 vol.% or more in a matrix composed of said deformation-induced martensite phase.

8. (previously added) The method of claim 7, including the step of applying a load of 785Pa or more to the stainless steel.